



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,195	03/06/2001	Heinz-Gunther Wilhelm	4616 US6	4092

7590 08/23/2004
Martin A. Farber
Suite 473
866 United Nations Plaza
New York, NY 10017

EXAMINER

DI GRAZIO, JEANNE A

ART UNIT PAPER NUMBER

2871

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,195

Applicant(s)

WILHELM, HEINZ-GUNTHER

Examiner

Jeanne A. Di Grazio

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE May 21, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-26,28-33 and 35-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-26,28-33 and 35-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims

Claims 20-26, 28-33 and 35-38 are pending, claim 34 having been cancelled per Amendment of April 15, 2004 and pursuant to Applicant's Request for Continued Examination of May 21, 2004.

Priority

Priority to German Patent Application No. 100 10 812 1 (March 8, 2000) is claimed.

Claim Objections

Claim 20 is objected to because of the following informalities.

As to claim 20, the limitation "the first and second hook elements extending toward each other along a surface of the liquid crystal cell" appears redundant in the context of Applicant's earlier recited limitation in claim 20 of "a first hook element ... which engages over the liquid crystal cell ... and ... a second hook element which engages over the liquid crystal cell in a region which lies opposite the contacting region." If first and second hook elements engage over a surface of the liquid crystal cell in opposing directions than they (first and second hook elements) extend toward each other.

Appropriate correction is **required**.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-26, 28-33 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 4,367,467 (to Emile, Jr.) in view of United States Patent 5,406,399 (to Koike).

As to claim 20 (amended), Emile, Jr. teaches and discloses a display device (Figure 1) having a housing (32 and 38) on a front side of which facing a viewer a liquid crystal cell (30) is mounted, and a printed circuit board (PCB 36) which is arranged on a rear of the housing (32 and 38) for making electrical contact with the liquid crystal display (30), a contacting element (60) which is clamped against the liquid crystal cell (Figure 6), is approximately plate-shaped and is guided at its larger sides in the housing (in upper slot 58b) for making electrical connection with the printed circuit board (36) and liquid crystal cell being arranged between the printed circuit board and a contacting region (point of contact top between contacting element and LCD top of Figure 6) which is arranged outside a display region thereof, wherein the housing (32 and 38) is provided with a first hook element (upper 72) as a mating holding element for the clamped contacting element (60), which engages over the LCD in the contacting region (upper portion of Figure 6) and a second hook element (lower 72) which engages over the LCD in a region which lies opposite the contacting region and is arranged outside the display region of the LCD, the

first and second hook elements extending toward each other along a surface of the liquid crystal cell (Figure 6).

In Emile, first and second hook elements (upper and lower 72) are a single component with the housing (32 and 38).

Emile, however, does not appear to explicitly specify that the housing with the first and second hook elements constitute a single plastic injection molded component.

Koike, however, teaches and discloses a liquid crystal display apparatus having a frame around the periphery and bottom and extending above polarizers (Title, entire patent). The frame (Figure 3, frame 17) is formed of a resin material and as such it can be mass produced at low cost with a high degree of accuracy by injection molding (Koike Column 4, Lines 46-49). In Koike, it is to be further noted that the frame and liquid crystal panel can be secured by means other than by bonding agents. For example, the frame and liquid crystal panel can be secured by being fitted as directed into a recessed portion of the frame (Column 4, Lines 56-64).

Koike is evidence that ordinary workers in the field of liquid crystal display devices would have found the reason, suggestion and motivation to manufacture a device housing with first and second hook elements as a single injection molded component in order to: (1) mass produce the device (2) at a low cost and (3) with a high degree of accuracy.

Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystal display devices at the time the invention was made to modify Emile in view of the teachings of Koike to mass produce a display device at low cost and with a high degree of accuracy.

Art Unit: 2871

As to claims 21-26, 28-33 and 35-38, Emile, Jr., discloses the claimed invention except for the molded pieces recited in claims 21-26, 28-33 and 35-38. It would have been obvious to one of ordinary skill in the art of display devices at the time the invention was made to include the molded articles in conjunction with the unitary device as claimed, since it has been held that making in one piece an article which has formerly been formed in multiple pieces involves only routine skill in the art (*In re Larson*, 340 F.2d 965, 968; 144 USPQ 347, 349 (CCPA 1965)). One would have been motivated to take the assembly as recited in Emile, Jr., and in view of Koike, and from that assembly of pieces to derive an injection molded device therefrom to reduce the number of pieces needed to manufacture a holder for an LCD in order to: (1) simplify manufacturing, (2) improve yield, (3) mass produce the device, (4) at low cost, and (5) for a high degree of accuracy.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (571)272-2289. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeanne Andrea Di Grazio
Patent Examiner
Art Unit 2871

JDG



TARIFUR R. CHOWDHURY
PRIMARY EXAMINER